

Attorney Docket 55434US002
U.S.S.N. 09/591,584

REMARKS/ARGUMENTS

Claims 1-11, 13-27 and 31-40 stand allowed. Claim 30 was objected to as being dependent upon a non-allowed claim, but was indicated as reciting allowable subject matter. Claim 12 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,118,540 to Hutchison in view of U.S. Patent No. 5,677,050 to Bilkadi et al.

With this Amendment, the limitation "an optically clear laminate" has been removed from claims 1 and 9. Claim 1 has further been amended to recite "A laminate attached to window glass suitable for use in a vehicular or architectural glazing element." Claim 9 has further been amended to recite "A vehicular or architectural glazing element." Support for this added subject matter can be found in the subject application on page 1, line 14, page 2, line 7 and page 10, line 27. No new matter is involved.

U.S. Patent No. 5,118,540 to Hutchison teaches a reflective film 100 in combination with a reflector element to form a parabolic trough solar energy concentrator, see column 7, lines 9-12. Hutchison further teaches that the "reflector element 210 may comprise support structure 212, which may be either solid or framework, holding a surface 214 configured in a trough like shape," see column 7, lines 20-23. The '540 patent also teaches "the flexible reflective film may be incorporated into other types of lighting reflectors and solar energy applications, e.g., parabolic solar dish and heliostat applications," see column 7, lines 41-44. However, nowhere does Hutchison disclose, teach or suggest using his film in combination with window glass. U.S. Patent No. 4,157,417 to Murphy discloses "transparent-reflective metallized solar control compositions and films for application to window glass to reduce heat, glare, etc., of solar radiation" (see the Abstract of the '417 patent.) Murphy also discloses applying a transparent solar control sheet material to a glass window pane, see claim 10. However, nowhere does Murphy disclose, teach or suggest attaching his laminate to a window glass suitable for use in a vehicular or architectural glazing element. U.S. Patent No. 5,677,050 to Bilkadi et al. discloses a retroreflective sheeting including a cured ceramer layer, wherein the sheeting may be used on raised pavement markers. Nowhere does Bilkadi et al. disclose, teach or suggest using their sheeting with windows. U.S. Patent No. 6,013,722 to Yang et al. does not disclose, teach or suggest attaching a laminate to a window glass suitable for use in a vehicular or architectural glazing element. U.S. Patent No. 6,033,785 to Tanaka et al. discloses a dual layer film for

Attorney Docket 55434US002
U.S.S.N. 09/591,584

application to a vehicular glass pane. However, Tanaka et al. do not disclose a laminate as defined in claims 1 and 9.

It is submitted that there is no motivation or suggestion in either the '540 patent or the '417 patent to combine the teachings of Hutchison and Murphy. Hutchison teaches providing a reflective film for use in a solar energy concentrator 200, see column 7, lines 9 and 10, and "other types of lighting reflectors ***,", see column 7, lines 41-45. Hutchison teaches that "when the reflector [element 210 of the concentrator 200] is oriented toward the sun, solar radiation impinging on any part of the surface of the flexible film 100 is reflected to converge at the line of focus of that parabolic surface," see column 7, lines 24-27. Hutchison further teaches that "to be efficient[,] a reflective film must be highly specularly reflective to visible, ultraviolet, and/or near infra-red light between about 300-2,500 nanometers," see column 1, lines 19-22 of the '540 patent. It is noted that the '540 patent teaches in column 2, lines 15-18, "a thin layer of silver *** is characterized by the presence of a spectral 'window' through which ultraviolet light in the 300-400 nanometer region readily passes." It is also noted that no mention is made in the '540 patent that a thin layer of silver is characterized by the presence of a spectral window through which visible light passes.

Murphy, in contrast, discloses a film having "a marked reduction in transmission of ultraviolet rays, infrared light and reduction in glare while retaining good transparency to visible light," see column 5, lines 25-28. Hence, the Hutchison film functions to reflect visible light in addition to ultraviolet and near infra-red light while the Murphy film functions to transmit visible light while reducing ultraviolet rays, infrared light and glare. Because the two films have such diametrically opposed functions, it is submitted that one skilled in the art would not have been motivated to combine their teachings as proposed in the Office Action. Nor is there any teaching or suggestion to one skilled in the art to secure the Hutchison film to a window glass in order to allow the very small amount of ultraviolet light passing through the Hutchison film to also pass through the window glass while reflecting the visible light away from the window glass. In point of fact, Murphy teaches away from such a combination as the Murphy film functions in an opposite manner, namely, to prevent ultraviolet light from passing through the window glass while allowing visible light to pass therethrough. Even presuming for the sake of argument that the teachings of Hutchison and Murphy can be combined, which is denied, neither Hutchison nor

Attorney Docket 55434US002
U.S.S.N. 09/591,584

Murphy discloses, teaches or suggests attaching a laminate to window glass such that the combination is suitable for use in a vehicular or architectural glazing element. Rather, the only teaching for providing a laminate/window glass combination suitable for use in a vehicular or architectural glazing element, as recited in claims 1 and 9, comes from the applicant's own disclosure, which cannot be used against him.

Accordingly, it is submitted that amended claims 1 and 9 and their respective dependent claims define patentably over the prior art.

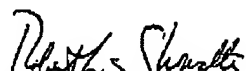
With this paper, claim 12 has been amended to recite "a laminate attached to window glass suitable for use in a vehicular or architectural glazing element." As noted above, neither Hutchison nor Bilkadi et al. disclose, teach or suggest using their film/sheeting with windows. Accordingly, it is submitted that claim 12 defines patentable invention.

Further with this paper, new claims 41 and 42 were added. It is submitted that dependent claims 41 and 42 recite additional limitations which further distinguish them patentably from the applied prior art. Both claims 41 and 42 recite "A vehicular or architectural glazing element comprising the laminate attached to window glass of claim 1." Support for this subject matter can be found in the subject application on page 1, line 14, page 2, line 7 and page 10, line 27. No new matter is involved. Nowhere is this subject matter disclosed, taught or suggested in the Hutchinson, Bilkadi et al., Murphy, Tanaka et al., or Yang et al. references, whether taken alone or in combination.

Attorney Docket 55434US002
U.S.S.N. 09/591,584

In view of the above remarks, applicant submits that claims 1-27 and 30-42 define patentably over the prior art. Early notification of allowable subject matter is respectfully requested.

Respectfully submitted,
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